

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method for the removal of silver from a cuprous chloride solution in a copper recovery process, comprising removing, in at least two stages, silver from [[a]] the cuprous chloride solution with soluble mercury, using wherein fine-grained copper powder is fed countercurrently to the cuprous chloride solution, the method comprising:

 feeding mercury into the cuprous chloride solution at preselected stages in a preselected molar ratio to the silver in the solution;

 precipitating a generated silver amalgam onto [[a]] the surface of fine-grained copper powder;

 removing the precipitated silver amalgam from the cuprous chloride solution for the separation of mercury and silver;

 recycling soluble mercury back to silver removal; and

 _____ treating the removed precipitated silver amalgam compound for the recovery of silver.

2. (currently amended) [[A]] The method according to claim 1, wherein the molar ratio of mercury to silver in a first amalgam precipitation stage is 0.5– 2.

3. (currently amended) [[A]] The method according to claim 1, wherein the molar ratio of mercury to silver in a second amalgam precipitation stage is at least 2.

4. (currently amended) [[A]] The method according to claim 3, wherein the molar ratio of mercury to silver in the second amalgam precipitation stage is between 2 – 10.

5. (currently amended) [[A]] The method according to claim 1, wherein the particle size of the fine-grained copper powder has a particle size of is less than 200 μm .

6. (currently amended) [[A]] The method according to claim 5, wherein the amount of fine-grained copper powder being countercurrently fed feed is in the range of 100 g/L.

7. (currently amended) [[A]] The method according claim 1, further comprising feeding the fine-grained copper powder countercurrently to a mercury removal stage after the at least two silver removal stages, ~~from which it moves countercurrently in relation to the solution flow.~~

8. (currently amended) [[A]] The method according to claim 1, ~~further comprising wherein the treating step comprises~~ leaching the precipitated silver amalgam into a dilute chloride solution using an oxidant, whereby the mercury dissolves as mercury chloride and the silver precipitates as silver chloride.

9. (currently amended) [[A]] The method according to claim 8, wherein the oxidant used is sodium hypochlorite.

10. (currently amended) [[A]] The method according to claim 8, wherein the oxidant used is hydrogen peroxide.

11. (currently amended) [[A]] The method according to claim 8, wherein the oxidant used is oxygen.

12. (currently amended) [[A]] The method according to claim 8, further comprising routing the dissolved mercury chloride back to the silver leaching step.

13. (currently amended) [[A]] The method according to claim 8, further comprising routing the silver chloride to a silver recovery step.

14. (currently amended) [[A]] The method according to claim 8, wherein ~~an~~ the alkali chloride content of the ~~concentrated~~ dilute chloride solution in the leaching step is at least 200 g/L.

15. (currently amended) [[A]] The method according to claim 1, wherein ~~an~~ amount of monovalent copper in the cuprous chloride solution to be purified is comprises 30 — 100 g/L of monovalent copper.

16. (currently amended) [[A]] The method according to claim 1, wherein ~~silver removal is performed at a~~ the cuprous chloride solution has pH value of 1 – 5 in the precipitating and removing steps.

17. (currently amended) [[A]] The method according to claim 1, further comprising removing silver from the cuprous chloride solution using fine-grained copper powder in a stage prior to the ~~before~~ at least two silver amalgam precipitation stages ~~occurs with~~ mercury.

18. (currently amended) [[A]] The method according to claim 17, wherein the ~~particle size of the~~ fine-grained copper powder has a particle size of is less than 200 µm.

19. (currently amended) [[A]] The method according to claim 18, wherein the amount of fine-grained copper powder being countercurrently fed feed is in the range of 100 g/L.